



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,688	07/17/2003	Takashi Hanamoto	03500.017429.	9629

5514 7590 03/06/2008
FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

MENBERU, BENIYAM

ART UNIT	PAPER NUMBER
----------	--------------

2625

MAIL DATE	DELIVERY MODE
-----------	---------------

03/06/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/620,688	Applicant(s) HANAMOTO, TAKASHI	
	Examiner BENIYAM MENBERU	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 21, 2008 has been entered.

Response to Arguments

2. Applicant's arguments, see Remarks, filed February 21, 2008, with respect to the rejection(s) of claim(s) 11, 12, 14, and 18-20 under U.S. Patent Application Publication No. US 2002/0122194 A1 to Kuwata et al in view of U.S. Patent No. 6774953 to Champion et al have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent No. 6330076 to Imaizumi et al.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Art Unit: 2625

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11, 12, 13, 14, 18, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. US 2002/0122194 A1 to Kuwata et al in view of U.S. Patent No. 6330076 to Imaizumi et al further in view of U.S. Patent No. 6198553 to Yamamoto et al.

Regarding claim 11, Kuwata et al '194 discloses an image processing method comprising the steps of:
selecting a color space conversion condition from among plural color space conversion conditions, including first and second color space conversion conditions (page 4, paragraph 55, 67; sRGB or NTSC color space condition), in accordance with the determination result obtained in a determining step (page 3, paragraph 39, 40, 41, 42; "color space parameter" determines the color space used.); and performing the color space conversion on the input image data, by using the selected color space conversion condition (page 5, paragraph 67; One of conversion to NTSC, sRGB, and extended sRGB is selected.),
wherein a second color space corresponding to the second color space conversion condition has a color gamut wider than a first color space corresponding to the first color space conversion condition (page 4, paragraph 55, lines 5-8; NTSC color space is the second color space and it is wider than the sRGB (first color space)).

However Kuwata et al '194 does not disclose determining whether or not input image data represents an image of a person as a subject of the image; and wherein, in a case where it is determined that the input image data represents the image of the person as

the subject of the image, the second color space conversion condition is selected.

Imaizumi et al '076 discloses determining whether or not input image data represents an image of a person as a subject of the image (column 20, lines 65-57; column 21, lines 1-6, 12-21, 54-60; In step s543 as shown in Figure 26, image data is judged to be of skin tone or not which corresponds to image of a person.); and wherein, in a case where it is determined that the input image data represents the image of the person as the subject of the image, the first color space conversion condition is selected (In Figure 26, when skin tone image is detected in step s543, step s544 executes a first color space processing using the graphs shown in Figures 25(d-f). The graphs in Figure 25d-f show conversion from L* data to L1* data in the lab color space (column 22, lines 1-22.).

Having the system of **Kuwata et al '194** and then given the well-established teaching of **Imaizumi et al '076**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Kuwata et al '194** as taught by **Imaizumi et al '076**, since **Imaizumi et al '076** stated in col. 26, lines 30-38, such a modification would provide optimization of image data related to the skin tone area.

Kuwata et al '194 discloses that the number of bits of the image data converted by using the first color space (sRGB) conversion condition is 8 bits (page 4, paragraph 55, lines 8-9). However Kuwata et al '194 does not disclose wherein the number of bits of the image data converted by using the second color space conversion condition

Art Unit: 2625

(NTSC color space conversion) is also 8 bits (i.e. same number of bits as the image data converted using the first color space conversion condition).

Yamamoto et al '553 discloses wherein the number of bits of the image data converted by using the second color space conversion condition (NTSC color space conversion) is 8 bits (column 19, lines 8-14; The converted NTSC image data is 8-bits).

Having the system of **Kuwata et al '194** and then given the well-established teaching of **Yamamoto et al '553**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Kuwata et al '194** as taught by **Yamamoto et al '553**, since **Yamamoto et al '553** stated in col. 19, Lines 8-17 (Figure 23, reference 20222), such a modification would provide 8-bit NTSC image data as needed by reference 20222 for further image processing for an RGB system.

Regarding claim 12, Kuwata et al '194 in view of Imaizumi et al '076 further in view of Yamamoto et al '553 teaches all the limitations of claim 11. Further Kuwata et al '194 discloses an image processing method according to Claim 11, wherein a first color space is an sRGB color space (page 5, paragraph 67).

Regarding claim 13, Kuwata et al '194 in view of Imaizumi et al '076 further in view of Yamamoto et al '553 teaches all the limitations of claim 11. Further Yamamoto et al '553 discloses an image processing method according to Claim 11, wherein the bit number of the color data converted by the first color space conversion is equal to the bit number of the color data converted by the second color space conversion (Kuwata et al '194 discloses that the number of bits of the

image data converted by using the first color space (sRGB) conversion condition is 8 bits (page 4, paragraph 55, lines 8-9). Yamamoto et al '553 discloses wherein the number of bits of the image data converted by using the second color space conversion condition (NTSC color space conversion) is 8 bits (column 19, lines 8-14; The converted NTSC image data is 8-bits)).

Regarding claim 14, Kuwata et al '194 in view of Imaizumi et al '076 further in view of Yamamoto et al '553 teaches all the limitations of claim 11. Further Kuwata et al '194 discloses an image processing method according to Claim 11, wherein said determining step is performed based on photographing mode information of the input image data (page 3, paragraph 40; "attribute information").

Regarding claim 18, Kuwata et al '194 in view of Imaizumi et al '076 further in view of Yamamoto et al '553 teaches all the limitations of claim 11. Further Kuwata et al '194 discloses an image processing method according to Claim 11, further comprising the step of performing an image correction on the image data that has been subjected to a color space conversion (page 5, paragraph 68; "gamma correction").

Regarding claim 19, Kuwata et al '194 discloses an image processing apparatus comprising:

a selection unit adapted to select a color space conversion condition from among plural color space conversion conditions, including first and second color space conversion conditions (page 4, paragraph 55, 67; sRGB or NTSC color space condition), in accordance with the determination result provided by said determination unit (page 3,

paragraph 39, 40, 41, 42; "color space parameter" determines the color space used.); and a color space conversion unit adapted to perform the color space conversion on the input image data, by using the selected color space conversion condition (page 5, paragraph 67; One of conversion to NTSC, sRGB, and extended sRGB color space is selected.),

wherein a second color space corresponding to the second color space conversion condition has a color gamut wider than a first color space corresponding to the first color space conversion condition (page 4, paragraph 55, lines 5-8; NTSC color space is the second color space and it is wider than the sRGB (first color space).).

However Kuwata et al '194 does not disclose a determination unit adapted to determine whether or not input image data represents an image of a person as a subject of the image; wherein, in a case where it is determined by said determination unit that the input image data represents the image of the person as the subject of the image, the first color space conversion condition is selected.

Imaizumi et al '076 discloses a determination unit adapted to determine whether or not input image data represents an image of a person as a subject of the image (column 20, lines 65-57; column 21, lines 1-6, 12-21, 54-60; In step s543 as shown in Figure 26, image data is judged to be of skin tone or not which corresponds to image of a person.); wherein, in a case where it is determined by said determination unit that the input image data represents the image of the person as the subject of the image, the first color space conversion condition is selected (In Figure 26, when skin tone image is

Art Unit: 2625

detected in step s543, step s544 executes a first color space processing using the graphs shown in Figures 25(d-f). The graphs in Figure 25d-f show conversion from L* data to L1* data in the lab color space (column 22, lines 1-22.).

Having the system of **Kuwata et al '194** and then given the well-established teaching of **Imaizumi et al '076**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Kuwata et al '194** as taught by **Imaizumi et al '076**, since **Imaizumi et al '076** stated in col. 26, lines 30-38, such a modification would provide optimization of image data related to the skin tone area.

Kuwata et al '194 discloses that the number of bits of the image data converted by using the first color space (sRGB) conversion condition is 8 bits (page 4, paragraph 55, lines 8-9). However Kuwata et al '194 does not disclose wherein the number of bits of the image data converted by using the second color space conversion condition (NTSC color space conversion) is also 8 bits (i.e. same number of bits as the image data converted using the first color space conversion condition).

Yamamoto et al '553 discloses wherein the number of bits of the image data converted by using the second color space conversion condition (NTSC color space conversion) is 8 bits (column 19, lines 8-14; The converted NTSC image data is 8-bits).

Having the system of **Kuwata et al '194** and then given the well-established teaching of **Yamamoto et al '553**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Kuwata et al '194** as taught by **Yamamoto et al '553**, since **Yamamoto et al '553** stated in col. 19, Lines

8-17 (Figure 23, reference 20222), such a modification would provide 8-bit NTSC image data as needed by reference 20222 for further image processing for an RGB system.

Regarding claim 20 (see Kuwata et al '194: page 2, paragraph 23; "recording medium"), see the rejection of claim 11 as shown above.

3. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. US 2002/0122194 A1 to Kuwata et al in view of U.S. Patent No. 6330076 to Imaizumi et al further in view of U.S. Patent No. 6198553 to Yamamoto et al further in view of U.S. Patent No. 6975437 to Takemoto.

Regarding claim 15, Kuwata et al '194 in view of Imaizumi et al '076 further in view of Yamamoto et al '553 teaches all the limitations of claim 11. However Kuwata et al '194 in view of Imaizumi et al '076 further in view of Yamamoto et al '553 does not disclose wherein said determining step is performed based on flash information of the input image data.

Takemoto '437 discloses wherein said determining step is performed based on flash information of the input image data (column 5, lines 50-57).

Having the system of ***Kuwata et al '194 in view of Imaizumi et al '076 further in view of Yamamoto et al '553*** and then given the well-established teaching of ***Takemoto '437***, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of ***Kuwata et al '194 in view of Imaizumi et al '076 further in view of Yamamoto et al '553*** as taught by ***Takemoto '437***, since ***Takemoto '437*** stated in column 6, lines 3-12, such a modification would

provide the flash information needed to specify the right tone curve for the image processing.

4. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. US 2002/0122194 A1 to Kuwata et al in view of U.S. Patent No. 6330076 to Imaizumi et al further in view of U.S. Patent No. 6198553 to Yamamoto et al further in view of U.S. Patent No. 6629107 to Ouchi et al.

Regarding claim 16, Kuwata et al '194 in view of Imaizumi et al '076 further in view of Yamamoto et al '553 teaches all the limitations of claim 11. However Kuwata et al '194 in view of Imaizumi et al '076 further in view of Yamamoto et al '553 does not disclose an image processing method according to Claim 11, wherein said determining step is performed based on keyword information of the input image data.

Ouchi et al '107 disclose wherein said determining step is performed based on keyword information of the input image data (column 8, lines 10-14, 44-67; column 9, lines 1-16; The reference 10 extracts person name which is the keyword information of the input image data. The person name is associated with the face information.).

Having the system of ***Kuwata et al '194 in view of Imaizumi et al '076 further in view of Yamamoto et al '553*** and then given the well-established teaching of ***Ouchi et al '107***, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of ***Kuwata et al '194 in view of Imaizumi et al '076 further in view of Yamamoto et al '553*** as taught by ***Ouchi et al '107***, since

Ouchi et al '107 stated in column 8, lines 44-65, such a modification would provide a method for identifying personal data objects in images.

Regarding claim 17, Kuwata et al '194 in view of Imaizumi et al '076 further in view of Yamamoto et al '553 further in view of Ouchi et al '107 teaches all the limitations of claim 16. Further Ouchi et al '107 discloses an image processing method according to Claim 16, wherein a face recognition process is performed on the input image data (column 8, lines 65-67; column 9, lines 1-7;), and said determining step is performed based on a result of the face recognition process (column 9, lines 1-17; The person's name information is determined to be associated with the face information that was extracted.).

Other Prior Art Cited

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6690822 to Chen et al discloses digital image processing.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beniyam Menberu whose telephone number is (571) 272-7465. The examiner can normally be reached on 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (571) 272-2600. The group receptionist number for TC 2600 is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

Beniyam Menberu

BM

02/28/2008



DAVID MOORE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600